

WE CLAIM:

1. A method of providing wireless terminal service in an Internet Protocol (IP) network comprising the steps of:
  - a wireless terminal requesting service utilizing a wireless protocol;
  - a terminal agent of the IP network detecting the request for service in a service area supported by terminal agent;
  - the terminal agent providing a wireless interface to the wireless terminal;
  - the terminal agent also providing an IP interface to the IP network; and
  - the terminal agent converting between wireless protocol and IP protocolwhereby the wireless terminal is served by the IP network.
2. A method according to claim 1 further comprising the step of the IP network treating the wireless terminal as an IP terminal of the IP network.
3. A method according to claim 1 further comprising the step of the wireless terminal treating the terminal agent as an MSC of its Public Land Mobile Network, PLMN.
4. A method according to claim 1 further comprising the step of the terminal agent registering the wireless terminal in a Home Location Register, HLR of the PLMN of the wireless terminal.
5. A method according to claim 1 further comprising the step of the terminal agent registering the wireless terminal in the IP network.
6. A method according to claim 1 further comprising the step of the terminal agent communicating with the IP network using H.323 protocol.

7. A method according to claim 1 further comprising the step of the terminal agent communicating with the IP network using Session Initiation Protocol, SIP.
8. A method according to claim 1 further comprising the step of the wireless terminal treating the terminal agent as a Global System for Mobile communication, GSM, network.
9. A method according to claim 1 further comprising the step of the wireless terminal treating the terminal agent as a Code Division Multiple Access, CDMA, network.
10. A method according to claim 1 further comprising the step of the wireless terminal treating the terminal agent as a Digital Advanced Mobile Phone System, DAMPS, network.
11. A method according to claim 1 further comprising the step of the wireless terminal treating the terminal agent as a Personal Digital Cellular, PDC, network.
12. A communication system providing wireless terminal service in an IP network comprising:
  - a gatekeeper for controlling access by IP terminals to the IP network; and
  - a terminal agent configured to facilitate IP network support of a wireless terminal not connected to the IP network, the terminal agent appearing as an IP terminal to the gatekeeper.
13. A system according to claim 12 wherein the terminal agent is configured to emulate a PLMN with respect to the wireless terminal.

14. A system according to claim 12 wherein the terminal agent further comprises a Home Location Register, HLR, for registering the wireless terminal.
15. A system according to claim 12 wherein the terminal agent further comprises a Visitor Location Register, VLR, for registering the wireless terminal with the Home Location Register, HLR, of the wireless terminal PLMN.
16. A system according to claim 12 wherein the terminal agent is configured to emulate an IP network terminal with respect to the gatekeepers.
17. A system according to claim 12 wherein the IP network comprises an H.323 network.
18. A system according to claim 12 wherein the IP network comprises a Session Initiation Protocol, SIP, network.
19. A system according to claim 12 wherein the wireless terminal comprises a GSM terminal.
20. A system according to claim 12 wherein the wireless terminal comprises a Code Division Multiple Access, CDMA, terminal.
21. A system according to claim 12 wherein the wireless terminal comprises a Digital Advanced Mobile Phone System, DAMPS, terminal.
22. A system according to claim 12 wherein the wireless terminal comprises a Personal Digital Cellular, PDC, terminal.

23. A terminal agent for interfacing a wireless terminal with an IP communication network comprising:

a transceiver for providing radio service to a wireless terminal;

a Radio Network Server, RNS, operably coupled to the transceiver for radio signal processing and transceiver control; and

a Network Access Controller, NAC, operably coupled to the RNS for conversion of signals between wireless protocol and IP protocol for facilitating exchange of the signals between the wireless terminal and the IP network.

24. A terminal agent according to claim 23 wherein the terminal agent is configured to emulate a PLMN with respect to the wireless terminal.

25. A terminal agent according to claim 23 wherein the terminal agent further comprises a Visitor Location Register, VLR, for registering the wireless terminal with the wireless terminal PLMN.

26. A terminal agent according to claim 23 wherein the terminal agent is configured to emulate an IP network terminal with respect to the IP network.

27. A terminal agent according to claim 23 wherein the IP network comprises an H.323 network.

28. A terminal agent according to claim 23 wherein the IP network comprises a Session Initiation Protocol (SIP) network.

29. A terminal agent according to claim 23 wherein the wireless terminal comprises a GSM terminal.

30. A terminal agent according to claim 23 wherein the wireless terminal comprises a CDMA terminal.

31. A terminal agent according to claim 23 wherein the wireless terminal comprises a DAMPS terminal.

32. A terminal agent according to claim 23 wherein the wireless terminal comprises a PDC terminal.